AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An operational amplifier in which a differential amplifier circuit equipped with a current mirror circuit is incorporated, the operational amplifier comprising:

a first switch connected to a portion between an ~~inversion~~ inverted input terminal and a ~~non-inversion~~ non-inverted input terminal of the differential amplifier circuit;

a second switch connected to a portion between an output terminal of the operational amplifier and the ~~inversion~~ inverted input terminal, the second switch controlling conductive state and non-conductive state contrary to the first switch;

a differential pair input circuit in which a current path terminal for a first transistor and a current path terminal for a second transistor are connected to a first current terminal and a second current terminal of the current mirror, respectively;

a third switch connected to a portion between a gate of the first transistor and an output terminal of the operational amplifier, the third switch being set in conductive state while the first switch is in conductive state and being set in non-conductive state while the first switch is in non-conductive state;

a first capacitor connected to a portion between a gate of the first transistor and predetermined voltage;

a fourth switch connected to a portion between a gate of the second transistor and the output terminal of the operational amplifier, the fourth switch being set in conductive state for a predetermined length of period while the second switch is in conductive state; and

a second capacitor connected to a portion between a gate of the second transistor and predetermined voltage,

wherein the operational amplifier has offset cancel function.

2. (Currently Amended) A line driver for amplifying at least one input ~~signal(s)~~ signal in an output period that is repeated periodically ~~by each input of the input signal every output period that appears repeatedly~~, the line driver including operational ~~amplifier(s)~~ amplifier allocated to respective input signals for amplifying the input signals, each of the operational ~~amplifier(s)~~ amplifier being equipped with a differential amplifier circuit in which a current mirror circuit is incorporated,

wherein each of the operational ~~amplifier(s)~~ amplifier comprises:

a first switch connected to a portion between an ~~inversion~~ inverted input terminal and a ~~non-inversion~~ non-inverted input terminal of the differential amplifier circuit;

a second switch connected to a portion between an output terminal of the operational amplifier and the ~~inversion~~ inverted input terminal, the second switch controlling conductive state and non-conductive state contrary to the first switch;

a differential pair input circuit in which a current path terminal for a first transistor and a current path terminal for a second transistor are connected to a first current terminal and a second current terminal of the current mirror, respectively;

a third switch connected to a portion between a gate of the first transistor and an output terminal of the operational amplifier, the third switch being set in conductive state while the first switch is in conductive state and being set in non-conductive state while the first switch is in non-conductive state;

a first capacitor connected to a portion between a gate of the first transistor and predetermined voltage;

a fourth switch connected to a portion between a gate of the second transistor and the output terminal of the operational amplifier, the fourth switch being set in conductive state for a predetermined length of period while the second switch is in conductive state; and

a second capacitor connected to a portion between a gate of the second transistor and predetermined voltage, and

wherein the line driver has offset cancel function.

3. (Currently Amended) A liquid crystal display device for applying an image data voltage signal ~~through plural data lines every horizontal period that appears repeatedly~~ in one horizontal period that is repeated periodically, the liquid crystal display device including operational ~~amplifier(s)~~ amplifier allocated to respective image data voltage signals for amplifying the input signals, each of the operational ~~amplifier(s)~~ amplifier being equipped with a differential amplifier circuit in which a current mirror circuit is incorporated,

wherein each of the operational ~~amplifier(s)~~ amplifier comprises:

a first switch connected to a portion between an ~~inversion~~ inverted input terminal and a ~~non-inversion~~ non-inverted input terminal of the differential amplifier circuit;

a second switch connected to a portion between an output terminal of the operational amplifier and the ~~inversion~~ inverted input terminal, the second switch controlling conductive state and non-conductive state contrary to the first switch;

a differential pair input circuit in which a current path terminal for a first transistor and a current path terminal for a second transistor are connected to a first current terminal and a second current terminal of the current mirror, respectively;

a third switch connected to a portion between a gate of the first transistor and an output terminal of the operational amplifier, the third switch being set in conductive state while the first switch is in conductive state and being set in non-conductive state while the first switch is in non-conductive state;

a first capacitor connected to a portion between a gate of the first transistor and predetermined voltage;

a fourth switch connected to a portion between a gate of the second transistor and the output terminal of the operational amplifier, the fourth switch being set in conductive state for a predetermined length of period while the second switch is in conductive state; and

a second capacitor connected to a portion between a gate of the second transistor and predetermined voltage, and

wherein the liquid crystal display device has offset cancel function.

4. (Currently Amended) An operational amplifier for amplifying an input signal in an output period that is repeated periodically in which a differential amplifier circuit equipped with a current mirror circuit is incorporated, the operational amplifier comprising:

a first switch connected to a portion between an ~~inversion~~ inverted input terminal and a ~~non-inversion~~ non-inverted input terminal of the differential amplifier circuit;

a second switch connected to a portion between an output terminal of the operational amplifier and the ~~inversion~~ inverted input terminal, the second switch controlling conductive state and non-conductive state contrary to the first switch;

a differential pair input circuit in which a current path terminal for a first transistor and a current path terminal for a second transistor are connected to a first current terminal and a second current terminal of the current mirror, respectively;

a third switch connected to a portion between a gate of the first transistor and an output terminal of the operational amplifier, the third switch being set in conductive state while the first switch is in conductive state and being set in non-conductive state while the first switch is in non-conductive state;

a first capacitor connected to a portion between a gate of the first transistor and predetermined voltage;

a fifth switch connected to a portion between a gate of the second transistor and the ~~non-inversion~~ non-inverted input terminal, the fifth switch being set in conductive state for a predetermined length of period while the second switch is in conductive state; and

a second capacitor connected to a portion between a gate of the second transistor and predetermined voltage, the second capacitor being configured to hold the input signal in the output period that is immediately preceding,

wherein the operational amplifier has offset cancel function.

5. (Currently Amended) A line driver for amplifying at least one input ~~signal(s) by each input of the input signal every output period that appears repeatedly~~ signal in an output period that is repeated periodically, the line driver including operational

~~amplifier(s)~~ amplifier allocated to respective input signals for amplifying the input signals, each of the operational ~~amplifier(s)~~ amplifier being equipped with a differential amplifier circuit in which a current mirror circuit is incorporated,

wherein each of the operational ~~amplifier(s)~~ amplifier comprises:

a first switch connected to a portion between an inverted input terminal and a non-inverted input terminal of the differential amplifier circuit;

a second switch connected to a portion between an output terminal of the operational amplifier and the ~~inversion~~ inverted input terminal, the second switch controlling conductive state and non-conductive state contrary to the first switch;

a differential pair input circuit in which a current path terminal for a first transistor and a current path terminal for a second transistor are connected to a first current terminal and a second current terminal of the current mirror, respectively;

a third switch connected to a portion between a gate of the first transistor and an output terminal of the operational amplifier, the third switch being set in conductive state while the first switch is in conductive state and being set in non-conductive state while the first switch is in non-conductive state;

a first capacitor connected to a portion between a gate of the first transistor and predetermined voltage;

a fifth switch connected to a portion between a gate of the second transistor and the ~~non-inversion~~ non-inversion input terminal, the fifth switch being set in conductive state for a predetermined length of period while the second switch is in conductive state; and

a second capacitor connected to a portion between a gate of the second transistor and predetermined voltage, the second capacitor being configured to hold the input signal in the output period that is immediately preceding and

wherein the line driver has offset cancel function.

6. (Currently Amended) A liquid crystal display device for applying an image data voltage signal ~~through plural data lines every horizontal period that appears repeatedly~~ in a horizontal period that is repeated periodically, the liquid crystal display device including operational ~~amplifier(s)~~ amplifier allocated to respective image data voltage signals for amplifying the input signals, each of the operational ~~amplifier(s)~~ amplifier being equipped with a differential amplifier circuit in which a current mirror circuit is incorporated,

wherein each of the operational ~~amplifier(s)~~ amplifier comprises:

a first switch connected to a portion between an ~~inversion~~ inverted input terminal and a ~~non-inversion~~ non-inverted input terminal of the differential amplifier circuit;

a second switch connected to a portion between an output terminal of the operational amplifier and the ~~inversion~~ inverted input terminal, the second switch controlling conductive state and non-conductive state contrary to the first switch;

a differential pair input circuit in which a current path terminal for a first transistor and a current path terminal for a second transistor are connected to a first current terminal and a second current terminal of the current mirror, respectively;

a third switch connected to a portion between a gate of the first transistor and an output terminal of the operational amplifier, the third switch being set in conductive state

while the first switch is in conductive state and being set in non-conductive state while the first switch is in non-conductive state;

a first capacitor connected to a portion between a gate of the first transistor and predetermined voltage;

a fifth switch connected to a portion between a gate of the second transistor and the ~~non-inversion~~ non-inverted input terminal, the fifth switch being set in conductive state for a predetermined length of period while the second switch is in conductive state; and

a second capacitor connected to a portion between a gate of the second transistor and predetermined voltage, the second capacitor being configured to hold the image data voltage signal in the horizontal period that is immediately preceding, and

wherein the liquid crystal display device has offset cancel function.

7. (Currently Amended) A line driver for amplifying at least one input ~~signal(s) by each input of the input signal every output period that appears repeatedly~~ signal in an output period that is repeated periodically, the line driver comprising:

operational amplifier ~~for amplifying the input signal(s), the~~ number of ~~which is~~ operational amplifiers being larger by at least one than number of the input ~~signal(s)~~ signal; and

a switch section for selecting ~~and switching~~ to the operational amplifiers ~~in amplification operation by receiving inputs of the input signals~~ in which the input signals are not input, the switch section switching every output period,

wherein offset cancellation is made on operational ~~amplifier(s) not selected during the output period~~ amplifier in which the input signals are not input.

8. (Currently Amended) A line driver ~~according to claim 7~~ for amplifying at least one input signal in an output period that is repeated periodically further comprising:

operational amplifiers ~~for amplifying the input signal(s),~~ the number of which is larger by one than number of the input ~~signal(s)~~ signal; and

switch sections, provided for ~~adjoining every two of the operational amplifiers~~ the input signals, the switch section ~~selecting one of the two operational amplifiers~~ being configured to input the input signal any one of the two operational amplifiers so as to share the operational amplifiers between the adjoining input signals,

wherein offset cancellation is made on ~~a non-selected~~ the operational amplifier to which the input signal is not inputted, and ~~adjoining switch sections~~ the operational amplifier to which the input signal is not inputted are switched in order every output period.

9. (Currently Amended) A liquid crystal display device for applying an image data voltage signal ~~through plural data lines every horizontal period that appears repeatedly~~ in a horizontal period that is repeated periodically, the liquid crystal display device comprising:

operational amplifiers ~~for amplifying the input signals,~~ the number of which is larger by at least one than number of the input ~~signal(s)~~ signal; and

a switch section for selecting ~~and switching~~ to the operational amplifiers ~~in amplification operation by receiving inputs of the input signals~~ in which the input signals are not input, the switch section switching every output period,

wherein offset cancellation is made on operational ~~amplifier(s)~~ amplifier in which the input signals are not input ~~not selected during the output period~~.

10. (Canceled).

11. (New) An offset canceling method of an operational amplifier configured to include an output period in which an input signal is amplified and output and a nonoperating period in which an input signal is not amplified, both periods being alternately periodically repeated, the method comprising the steps of:

acquiring, in the output period that is on-cycle preceding, the output signal or input signal of the operational amplifier as reference voltage;

acquiring an offset value with respect to the reference voltage of the operational amplifier in the nonoperating period following the above step; and

performing offset cancel of the operational amplifier according to the offset value in the output period following the above step.